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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/764,506

01/27/2004

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EXAMINER

CUNNINGHAM, GREGORY F

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

10/10/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/764,506

Applicant(s)

YAMAZAKI ET AL.

Examiner

Greg F. Cunningham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 14 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This action is responsive to communications of application received 01/27/2004.
2. The disposition of the claims is as follows: claims 1 – 6 and 14 are pending in the application. Claims 1 and 14 are independent claims. Claims 7 – 13 are non-elected restricted claims.
3. When making claim amendments, the applicant is encouraged to consider the references in their entireties, including those portions that have not been cited by the examiner and their equivalents as they may most broadly and appropriately apply to any particular anticipated claim amendments.

#### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1-3 and 5 are rejected under 35 U.S.C. 102(a) as being anticipated by Lenoir, (US 6,741,737 B1).

- A. Lenoir discloses claim 1, “An electronic paper reading device comprising:  
a reading component for optically reading an electronic paper which is filled out by hand [col. 1, Ins. 29-40; col. 2, Ins. 37-39; col. 4, ln. 44 – wherein ‘handwritten’ corresponds to “filled out by hand”], in a state in which a first image which has been recorded on the electronic paper

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in advance, being displayed [col. 1, lns. 36-50; col. 6, lns. 50-58 – wherein ‘form’ and/or ‘document’ correspond to “a first image which has been recorded on the electronic paper in advance” and ‘one screen or a portion of a screen is used to display all or a portion of a document image’ corresponds to “being displayed”];

a recognition component for recognizing the first image [col. 1, lns. 61-66; col. 5, lns. 5-16 – see ‘recognition’]; and

an extracting component for extracting image data of a second image that represents contents with which the electronic paper is filled out by hand, based on a recognizing result of the recognition of the first image by the recognition component, from a result of the reading by the reading component [col. 1, lns. 29-37; col. 2, lns. 1-8; col. 4, lns. 64-66 – see ‘extract(ion/ed)’]” supra [as detailed].

B. Per independent claim 14, this is directed to performing a method for the device of independent claim 1, and therefore is rejected to independent claim 1.

C. Lenoir discloses claim 2, “The device of claim 1, wherein the recognition component recognizes the first image by obtaining image data of the first image, and the extracting component extracts image data of the second image by estimating the first image in accordance with the reading result by the reading component based on the image data obtained by the recognition component, and removing the first image, which is estimated from an image represented by the reading result [col. 1, ln. 66 - col. 2, ln. 8, wherein ‘image of the scanned document’ corresponds to “the recognition component recognizes the first image by obtaining image data of the first image”; ‘empty rectangles’ corresponds’ to “extracting component extracts image data of the second image”; ‘which are then used as a cover set to eliminate the

areas of a document that do not contain textual data' corresponds to "removing the first image"; and 'scan documents into a digital image, segment the image into blocks of textual and non-textual data then perform optical character recognition on the text' corresponds to "estimating the first image in accordance with the reading result by the reading component based on the image data obtained by the recognition component"]" supra for claim 1 and furthermore [as detailed].

D. Lenoir discloses claim 3, "The device of claim 2, wherein identification information for identifying image data of the first image or a storage location of the image data is recorded on the electronic paper [col. 1, ln. 66 - col. 2, ln. 8; col. 2, lns. 37-43, wherein 'text rectangles' corresponds to "identification information for identifying image data of the first image"], and the recognition component obtains the image data by reading the image data from the electronic paper or identifies the storage location of the image data based on identification information read from the electronic paper, and obtains the image data from the identified storage location [corresponds to 'That system identifies all of the blank areas by rectangles and then uses that as a cover set to identify the portion of the document image that contains character data which may then be provided to a text extractor for storage']" supra for claim 2 and furthermore [as detailed].

E. Lenoir discloses claim 5, "The device of claim 1 further comprising a control component which recognizes identification information for identifying the electronic paper which is filled out by hand, and which associates the obtained image data of the second image with the identification information and manages the image data [col. 1, lns. 29-50, see 'hand written'; col. 1, ln. 61 - col. 2, ln. 8; col. 2, lns. 37-57, wherein 'The analysis of a scanned document image is primarily used to identify the empty rectangles which are then used as a cover set to eliminate

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the areas of a document that do not contain textual data' corresponds to "which associates the obtained image data of the second image with the identification information and manages the image data"]" supra for claim 1 and furthermore [as detailed].

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lenoir as applied to claim 5 above, and further in view of Matsumoto (US 5,038,218).

A. Lenoir discloses claim 6, "The device of claim 5, further comprising a detection component for detecting a relationship between an orientation of the electronic paper or the first image, and that of the second image, wherein, based on the relationship detected by the detection component, the control component controls the image data of the second image to orient the first image and the second image in the same direction when both the first image and the second image are recorded on the electronic paper" supra for claim 5.

However, Lenoir does not appear to disclose, "further comprising a detection component for detecting a relationship between an orientation of the electronic paper or the first image, and that of the second image, wherein, based on the relationship detected by the detection component, the control component controls the image data of the second image to orient the first image and the second image in the same direction when both the first image and the second

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image are recorded on the electronic paper”, but Matsumoto in [abstract and col. 3, ln. 62 – col. 4, ln. 11, corresponding with ‘The control means includes means for determining whether or not the resolution and the print orientation (or direction relative to the page) of the first type of image data are equal to those of the second type of image data. If the resolutions and the print orientation are respectively not equal to each other, the resolution converting means and the data rotating means are operated to make the resolutions and the print orientation respectively equal to each other’].

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply optically reading documents disclosed by Lenoir in combination with orientation correction disclosed by Matsumoto, and motivated to combine the teachings because it would save a great deal of time and labor as revealed by Matsumoto in col. 2, lns. 30-32.

#### *Allowable Subject Matter*

8. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### *Responses*

9. Responses to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231.

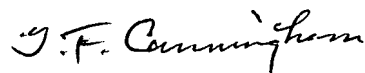
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*Inquiries*

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory F. Cunningham whose telephone number is (571) 272-7784.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Bella can be reached on (571) 272-7778. The Central FAX Number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Gregory F. Cunningham  
Examiner, Art Unit 2624

gfc

10/03/2007



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